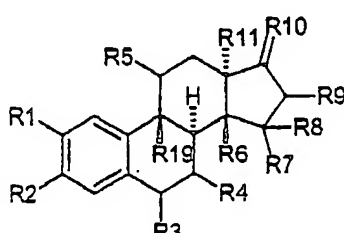




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<p>(21) International Application Number: PCT/EP00/03470 (22) International Filing Date: 17 April 2000 (17.04.00) (30) Priority Data: 199 17 930.1 15 April 1999 (15.04.99) DE (71) Applicant (for all designated States except US): SCHERING AKTIENGESELLSCHAFT [DE/DE]; Müllerstrasse 178, D-13353 Berlin (DE). (72) Inventors; and (75) Inventors/Applicants (for US only): SCHWARZ, Siegfried [DE/DE]; Ottogerd-Müllmann-Strasse 17, D-07743 Jena (DE). KOSEMUND, Dirk [DE/DE]; Ulan-Bator-Strasse 51, D-99091 Erfurt (DE). MÜLLER, Gerd [DE/DE]; Magdelstieg 132, D-07745 Jena (DE). RICHTER, Margit [DE/DE]; Magdelstieg 117b, D-07745 Jena (DE). PETERS, Olaf [DE/DE]; Am Birstiel 22, D-07745 Jena (DE). DROESCHER, Peter [DE/DE]; Lessingstrasse 7, D-99425 Weimar (DE). ELGER, Walter [DE/DE]; Schorlemmer- allee 12b, D-14195 Berlin (DE). HILLISCH, Alexander [DE/DE]; Lutherstrasse 84, D-07745 Jena (DE). BÖMER, Ulf [DE/DE]; Neue Nochstrasse 11, D-13347 Berlin (DE).</p>		<p>FRITZEMEIER, Karl-Heinrich [DE/DE]; Rabenstrasse 5a, D-13505 Berlin (DE). HEGELE-HARTUNG, Christa [DE/DE]; Woellenbeck 101, D-45470 Mülheim an der Ruhr (DE). (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</p>
<p>(54) Title: ENT-STEROIDS AS SELECTIVELY ACTIVE ESTROGENS</p> <div style="text-align: center;">  <p>(I)</p> </div> <p>(57) Abstract</p> <p>This invention describes the new ent-steroids of general formula (I) in which R¹, R², R³, R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹ and R¹⁹ have the meanings that are indicated in the description, as pharmaceutical active ingredients that in vitro have a higher affinity to estrogen receptor preparations of rat prostates than to estrogen receptor preparations from rat uteri and in vivo preferably a preferential action on bone rather than the uterus and/or pronounced action with respect to stimulation of the expression of 5HT_{2a}-receptors and transporters, their production, their therapeutic use and pharmaceutical forms for dispensing, which contain the new compounds. The invention also describes the use of steroids, on which the (8α-H, 9β-H, 10α-H, 13α-H, 14β-H)-gonane skeleton is based, for treatment of estrogen-deficiency-induced diseases and conditions.</p>		